Pre-Operative Optimization for the Primary Care Provider

1. Assess Patient Risk Factors using ASA physical status, functional status and airway risk

A. Physical Status- higher the score, higher the risk of postop morbidity, LOS, ICU admission

ASA PS classification	Definition	Examples, including, but not limited to:
ASA I	A normal healthy patient.	Healthy, non-smoking, no or minimal alcohol use.
ASA II	A patient with mild systemic disease.	Mild diseases only without substantive functional limitations. Current smoker, social alcohol drinker, pregnancy, obesity (30<BMI<40), well-controlled DM/HTN, mild lung disease.
ASA III	A patient with severe systemic disease.	Substantive functional limitations; one or more moderate to severe diseases. Poorly controlled DM or HTN, COPD, morbid obesity (BMI ≥40), active hepatitis, alcohol dependence or abuse, implanted pacemaker, moderate reduction of ejection fraction, ESRD undergoing regularly scheduled dialysis, premature infant PCA<60 weeks, history (>3 months) of MI, CVA, TIA, or CAD/stents.
ASA IV	A patient with severe systemic disease that is a constant threat to life.	Recent (<3 months) MI, CVA, TIA, or CAD/stents, ongoing cardiac ischemia or severe valve dysfunction, severe reduction of ejection fraction, sepsis, DIC, ARDS, or ESRD not undergoing regularly scheduled dialysis.
ASA V	A moribund patient who is not expected to survive without the operation.	Ruptured abdominal/thoracic aneurysm, massive trauma, intracranial bleed with mass effect, ischemic bowel in the face of significant cardiac pathology or multiple organ/system dysfunction.
ASA VI	A declared brain-dead patient whose organs are being removed for donor purposes.	

B. Functional status: predicts periop cardiac event

Subjective Evaluation
Poor functional capacity < 4 mets Can care for self and do ADLs. Requires non-invasive cardiac testing for non-cardiac procedures
Good functional capacity >= 4 mets Can walk up two flights of stairs, do heavy housework, walk 4 miles per hour at ground level. Usually no cardiac w/u required for low risk procedures
Excellent functional capacity > 10 mets Engage in strenuous sport like basketball, tennis, swimming, skiing.

If functional status>=4mets, then no further testing.

C. Airway risk assessment:

Loose, capped or artificial teeth
History of dental injury after anesthesia or excessive sore throat after anesthesia
History of requiring "small airway tube"
Elevated serum bicarbonate to predict OSA
BMI>40

Use OSA Site: http://stopbang.ca/osa

2. When to order LABS:

Order...	When...
CBC	Anticipate hi EBL or fluid shifts, Hx bleeding diathesis, or Hx liver disease
CMP	Hx Chronic kidney disease, hx CHF, or anticipate fluid shifts
PT/PTT	Hx bleeding diasthesis, warfarin or heparin use, long term antibiotic use
Chest Xray	Smoker, active pulmonary disease
EKG	Known CAD, hx uncontrolled htn, hx CKD, and/or hx DM
Fasting glucose	Hx DM, Obesity
LFTs	Hx Cirrhosis

*not necessary in low risk elective procedures

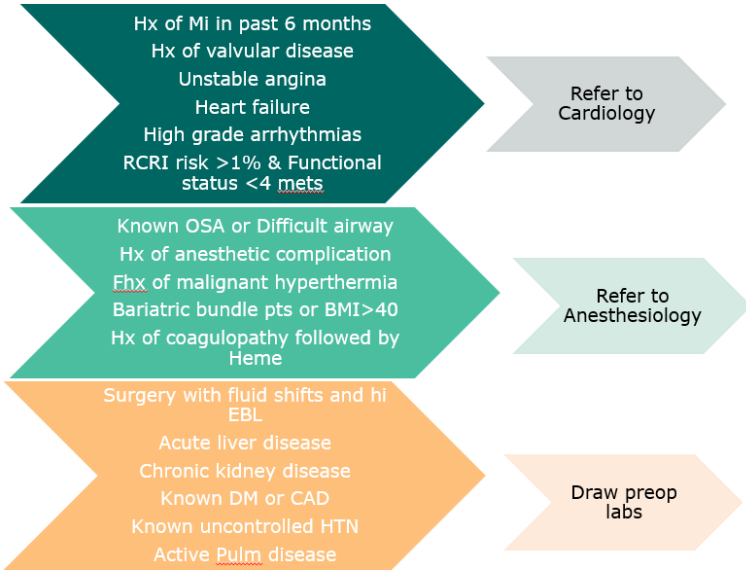
*clinicians ignore 30-60% of abnormal pre-op labs

*direct costs $18 billion

*indirect costs are patient anxiety, lost wages

Refer to other CCN ICPs for additional resources:
1. ICP nicotine use cessation
2. ICP peri-procedural management of antithrombotic agents

3. When to refer – Optimizing referrals and peri-operative testing



4. Improving patient's postop recovery thru ERAS protocols

Pre-Surgery Fasting Guidelines

It is extremely important to follow the below instructions before surgery. If you do not follow these instructions, your surgery may be delayed or cancelled.

- **STOP EATING AT MIDNIGHT prior to your surgery**
  - NO food chewing gum, mints, candy or alcohol are allowed after midnight.
- **You may DRINK 20 OUNCES OF CLEAR LIQUIDS between midnight and 2 hours before leaving your house for the hospital.***
  - The only liquids you can drink during this time are:
  - Sport/electrolyte drinks (ex. Gatorade, Powerade)
  - Clear Ensure or Boost
  - Apple Juice
  - Water
  - Tea (without milk or cream)

Note: If you are diabetic, you may have Gatorade zero or clear liquids without sugar.

***EXCEPTIONS**

- Always follow specific instructions from your surgeon.
- If you have End Stage Kidney Disease (ESRD), Achalasia (difficulty swallowing), Gastroparesis (slow stomach emptying), Severe GERD (acid reflux), or History of Gastric Bypass Surgery, DO NOT eat or drink anything by mouth after midnight prior to your surgery.

If you have questions, please call the AAMC Prep team 443-481-3920. If your surgery is at the Edwards Surgical Pavilion, please call 443-481-5700.

Luminis Health.

5. This is shared decision making! Here are some useful phone numbers:

LH AAMC Anticoagulation Center 443-481-5826
LH AAMC Anesthesia/Preadmission Testing 443-481-3624
LH AAMC Prep Team 443-481-3920
LH AAMC Tobacco Cessation Program 443-481-5366
LH AAMC One Call Care Mgmt 443-481-5652

6. Additional Resources

www. clevelandclinicmeded.com/medicalpubs/diseasemanagement/preventive-medicine/perioperative-evaluation/
www. aafp.org/afp/2013/0315/p414.html
surgical risk calculators: https://www.mdcalc.com/revised-cardiac-risk-index-pre-operative-risk and https://www.facs.org/quality-programs/acs-nsqip